

In the claims:

Please amend the claims as follows:

A1
Claim 1 (currently amended): A method of receiving data from a network, comprising:
issuing a ~~receive~~ request directing a transfer of data from one of a plurality of device
ports to a ~~buffer-memory~~ storage unit and specifying a thread from among a plurality of
processing program threads to process the data.

Claim 2 (currently amended): The method of claim 1, further comprising:
determining if ~~any~~ at least one of the plurality of device ports coupled to the network
require service.

Claim 3 (currently amended): The method of claim 2, further comprising:
transferring the data to the ~~buffer-memory~~ storage unit and signaling to the specified
program thread that the data is ready for processing.

Claim 4 (original): The method of claim 2, wherein determining comprises:
interrogating the plurality of device ports to identify which of the plurality of device ports
require service.

Claim 5 (original): The method of claim 4, wherein determining further comprises:
preparing control information corresponding to those device ports identified as requiring
service.

Claim 6 (currently amended): The method of claim 5, wherein the control information
comprises ~~receive-ready flags~~ indicators each associated with a device port receive FIFO in a
corresponding one of the device ports.

Claim 7 (currently amended): The method of claim 6, wherein interrogating comprises:

A2 polling the state of the ready flags to determine if the ~~ready flags~~ indicators are asserted, the assertion of the ~~ready flags~~ indicators indicating that the corresponding device ports have data ready for transfer.

Claim 8 (currently amended): The method of claim 7, wherein the ~~receive ready flags~~ indicators indicate that the associated device port receive FIFO has reached a threshold level of fullness.

Claim 9 (currently amended): The method of claim 8, wherein the ~~receive ready flags~~ indicators indicate that the associated device port receive FIFO stores a full network packet.

Claim 10 (currently amended): The method of claim 5, further comprising:
maintaining a receive ready count, the receive ready count being incremented ~~when~~ in
response to the control information is being prepared.

Claim 11 (original): The method of claim 5, wherein preparing control information further comprises:

writing a flag to a control and status register for each device port in the plurality of device ports that is determined to require service.

Claim 12 (original): The method of claim 11, wherein issuing comprises:
obtaining the control information from the control and status register; and
selecting from each device port in the plurality of device ports having set bits in the control and status register a port for servicing.

Claim 13 (original): The method of claim 12, wherein issuing further comprises:
determining which among the plurality of program threads is available; and
assigning an available program thread to the selected port.

Claim 14 (original): The method of claim 12, wherein selecting a port comprises:

using the receive ready count to determine if the ready flags reflect current status of the device port.

A2

Claim 15 (currently amended): The method of claim 3, further comprising:
maintaining a receive request count for counting transfer of data to the ~~buffer memory~~
storage unit, the receive request count being incremented by one upon the transfer of the data to
the ~~buffer memory~~ storage unit and signaling to the specified program thread.

Claim 16 (currently amended): The method of claim 15, wherein selecting a port further
comprises:

using the receive request count to determine if the ~~ready flags~~ indicators reflect current
status of the device ports.

Claim 17 (original): A method of receiving data from a plurality of peripheral ports,
comprising:

determining that the one of the plurality of peripheral ports requires servicing;
issuing a receive request based on the determination, the receive request directing the
transfer of data from the one of the plurality of peripheral ports to a buffer memory and
specifying a program thread from among of a plurality of processing program threads to process
the data; and

transferring the data to the buffer memory and signaling to the specified thread that the
data is ready for processing.

Claim 18 (currently amended): An article comprising a computer-readable medium
which stores computer-executable instructions for receiving data from a plurality of ports, the
instructions causing a computer to:

issue a receive request directing a transfer of data from one of a plurality of device ports
to a ~~buffer memory~~ storage buffer and specifying a program thread from among a plurality of
processing program threads to process the data.

Claim 19 (currently amended): The article of claim 18, the article further comprises instructions causing a computer to:

determine if any at least one of the plurality of device ports coupled to the network require service.

Claim 20 (currently amended): The article of claim 19, the article further comprises instructions causing a computer to:

transfer the data to the ~~buffer memory~~ storage unit and signal to the specified program thread that the data is ready for processing.

Claim 21 (original): The article of claim 19, wherein the instructions to determine comprise instructions causing a computer to:

interrogate the plurality of device ports to identify which of the plurality of device ports require service; and

prepare control information corresponding to those device ports identified as requiring service.

Claim 22 (currently amended): The article of claim 21, the article further comprises instructions causing a computer to:

maintain a receive ready count, the receive ready count being incremented ~~when in~~ response to the control information is being prepared.

Claim 23 (original): The article of claim 22, wherein the instructions to issue comprise instructions causing a computer to:

use the receive ready count to check the current status of the device port.

Claim 24 (currently amended): The article of 19, the article further comprises instructions causing a computer to:

Applicant : Gilbert Wolrich et al.
Serial No. : 09/475,614
Filed : December 30, 1999
Page : 6 of 8

Attorney's Docket No.: 10559-137001 / P7876

maintain a receive request count for counting transfer of data to the ~~buffer memory~~
storage unit, the receive request count being incremented by one upon the transfer of the data to
the buffer memory and signaling to the specified program thread.

Claim 25 (original): The article of claim 24, wherein the instructions to issue comprise
instructions causing a computer to:

use the receive request count to check the current status of the device ports.

Claim 26 (withdrawn)

Claim 27 (withdrawn)

Claim 28 (withdrawn)
